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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/630,593

07/30/2003

Yoshinori Yamada

FY.50601US0A

1657

20995

7590

02/28/2005

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EXAMINER

WAKS, JOSEPH

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/630,593	Applicant(s) YAMADA ET AL.	
	Examiner Joseph Waks	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recess within the crankcase cover as recited in claim 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "24" and "26" have both been used to designate the

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electronic control module. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 5, 6, 11, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims depend on themselves.

Re claims 5, 6, 15 and 16, the claims are depending on themselves.

Re claim 11, "the flywheel" lacks antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 8, 9, 12, 13, 17, 18 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sagimoto et al. (US 6,784,560).

Sagimoto et al. disclose invention as claimed: a power generator unit including a housing 18 with air inlet openings 79, 80 and outlet openings 68, an engine 11 disposed within the housing, a muffler 17 communicating with the engine through an exhaust conduit 63, a generator 13 driven by the engine and disposed within the housing, a first fan 43 driven by the engine and disposed on one side of the engine and a second fan 54 driven by the engine and disposed on the other side of the engine, a battery 14 disposed within the housing immediately next to but spaced apart from the air inlet openings 80, an electronic control module 76, 77, 78 communicating with the engine and generator so as to control at least one operational characteristic of the power generator unit, the electronic control module positioned immediately next to, but spaced apart from the air intake opening 80, each intake opening communicating with an interior space within the housing in which air that flows through the one air inlet opening and over the battery merges with air that flows through the other air inlet opening and over the electronic control module, the first fan drawing air from the interior space and communicating with a first air path that extends from the first fan, across at least portions of the exhaust conduit and the muffler, to the air outlet opening, and the second fan drawing air from the interior space and communicating with a second air path that

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passes across the generator and over at least a portion of the muffler before exiting the outlet opening, a crankcase 39.

7. Claims 18, 20, and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (US 5,899,174).

Anderson et al. disclose invention as claimed: a power generator unit 10 including a cover 7 having a first air intake opening 13, a second air intake opening 23, and a discharge opening 65, an engine 1 including a first body portion that defines, at least in part, a combustion chamber, a second body portion that defines, at least in part, a crankcase chamber and is disposed next to the first body portion, a muffler 51 that receives exhaust gases from the combustion chamber, a generator 3 driven by the engine, the generator being mounted inside a generator housing 27, 28, 29, a first fan 11 and a second fan 15 driven by the engine, the first and second air intake openings being disposed on one side of the cover, the engine being disposed downstream of the first fan, and the discharge opening being disposed downstream of the engine, whereby a first cooling air path occurs when the engine drives the first fan to draw external air through both air intake openings to cool at least the first body portion of the engine and thence to discharge heated air through the discharge opening, the second air intake opening being disposed relative to the first and second fans such that at least a portion of external air drawn through at least one of the air intake openings passes through air vents located in the generator housing, through the second fan so as to produce a second cooling air path, and exits the cover through the discharge opening, the generator being disposed generally in the second cooling air path

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 7, 10, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sagimoto et al. (US 6,784,560) in view of Higuchi et al. (US 6,792,897).

Sagimoto et al. disclose the power generation unit essentially as claimed. However, Sagimoto et al. do not disclose the crankcase cover including a recess that receives at least a portion of the generator and the engine directly driving a flywheel that comprises the first fan.

Higuchi et al. disclose a power generator unit 1 having a crankcase 14 with a recess to accommodate the generator 22, 23 and a flywheel 16 comprising the fan 17 for the purpose of soundproofing the generator unit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the unit as taught by Sagimoto et al. and to provide crankcase cover including a recess that receives at least a portion of the generator and the a flywheel that comprises the fan as taught by Higuchi et al. for the purpose of shortening and stabilizing the rotating system, thus reducing the system noise during the operation.

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10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,899,174) in view of Higuchi et al. (US 6,792,897).

Anderson et al. disclose the power generation unit essentially as claimed. However, Anderson et al. do not disclose the generator housing forming, at least in part, the crankcase chamber.

Higuchi et al. disclose a power generator unit 1 having the generator housing 15 forming in part the crankcase chamber for the purpose of soundproofing the generator unit.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the unit as taught by Anderson et al. and to provide the generator housing forming, at least in part, the crankcase chamber for the purpose of shortening and stabilizing the rotating system, thus reducing the system noise during the operation.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US 5,899,174) in view of Tanaka et al. (US 4,859,886).

Anderson et al. disclose the power generation unit essentially as claimed. However, Anderson et al. do not disclose the first body of the engine including at least one fin.

Tanaka et al. disclose in Figure 3 the power generation unit having engine with first body 103 including fins.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to design the unit as taught by Anderson et al. and to provide the

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engine including fins as taught by Tanaka et al. for the purpose of improving the heat dissipation from the engine to the cooling air stream.

Allowable Subject Matter

12. Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The feature of the crankcase cover including at least one opening through which the second fan draws cooling air into the crankcase cover and over at least a portion of the generator, in combination with the other limitations present, are neither disclosed nor taught by the prior art of record.

Prior Art

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Waks whose telephone number is (571) 272-2037. The examiner can normally be reached on Monday through Thursday 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Joseph Waks
Primary Examiner
Art Unit 2834

2/19/05